THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte RONALD L. BEGGS, SCOTT LEIGH and JEFF T. FENTON

_____

Appeal No. 1996-2341
Application 08/389,554[1]

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ON BRIEF

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Before GARRIS, PAK and OWENS, *Administrative Patent Judges.*

OWENS, *Administrative Patent Judge*.

DECISION

This is an appeal from the examiner's final rejection of

[1] Application for patent filed February 15, 1995. According to the appellant, the application is a continuation of Application 08/011,164, filed January 29, 1993, now abandoned.

claims 1, 3, 4 and 6-10, which are all of the claims remaining in the application.

THE INVENTION

Appellants' claimed invention is directed toward a shear thinnable, thickened composition containing recited amounts of a water-miscible organic liquid, water, hydrated alumina, and a water-soluble agent which induces flocculation or gelling of the alumina. Appellants indicate that the uses of the composition include providing sufficient viscosity to paint removers that they adhere to vertical surfaces, and providing sufficient viscosity to aircraft deicing compositions that they adhere to the inclined surfaces of wings until being removed by wind shear (specification, page 1, lines 8-19). Claim 1 is illustrative and reads as follows:

1. A shear thinnable, thickened composition comprising:

from about 30 to about 85% by weight of a water-miscible, organic liquid:

from about 0.5 to about 25% by weight of a hydrated alumina, calculated as $A1_2O_3$, said alumina being of a type that will function as a thixotrope in said composition;

from about 15 to about 70% by weight water; and

from about 0.005 to about 5% by weight of a water-soluble gelling agent, said gelling agent being dissolved in said composition and of a type that induces flocculation or gelling of said alumina to form a thickened composition, said composition being a stable gel when in the quiescent stage but becoming free-flowing on the application of a moderate shearing force.

THE REFERENCES

Munro	3,981,826	Sep. 21, 1976
Baxter	4,950,416	Aug. 21, 1990
Wilkins et al. (Wilkins)	5,215,675	Jun. 1, 1993 (filed Mar. 16, 1992)

THE REJECTIONS

The claims stand rejected under 35 U.S.C. § 103 as follows: claims 1, 3, 4 and 6-10 over Munro; claims 1 and 6 over Munro in view of Baxter; and claims 1, 3, 4 and 6-10 over Wilkins.[2]

OPINION

We have carefully considered all of the arguments

[2] The rejection under 35 U.S.C. § 112, fourth paragraph has been withdrawn (answer, pages 2 and 7). As stated by the examiner (answer, page 2), the objection to the title is a petitionable issue rather than an appealable issue and, therefore, is not before us.

advanced by appellants and the examiner and agree with appellants that the aforementioned rejections are not well founded. Accordingly, we do not sustain these rejections.

Rejection over Munro

Munro discloses a substantially non-aqueous liquid or pasty gelatinous detergent composition which is capable of acting as a scouring agent when in concentrated form, but which acts as a

water-soluble dish washing composition or as a non-abrasive hard surface cleaner when in aqueous solution (col. 1, lines 5-11). By “substantially non-aqueous”, Munro means that the composition “contains not more than about 5% water, apart from that present as water of crystallization” (col. 1, line 67 - col. 2, line 2). Munro’s disclosed (col. 3, line 46 - col. 4, line 2) suitable concentrations of 1) non-aqueous, water-miscible liquid medium (col. 3, lines 7-18), which corresponds to appellants’ water-miscible organic liquid (specification, page 3, line 4 - page 4, line 2), 2) suspending agent (col. 3,

lines 19-41), which can be alumina, can make the composition shear thinnable, and corresponds to appellants' hydrated alumina (specification, page 4, lines 3-21), 3) and inorganic salt (col. 2, line 48 - col. 3, line 2), which corresponds to appellants' water-soluble gelling agent (specification, page 4, line 22 - page 5, line 12), overlap with those recited in appellants' claim 1.

Munro's composition, when in the concentrated, shear thinnable form, differs from appellants' claimed composition in that Munro's composition contains no more than about 5 wt% water,

apart from that present as water of crystallization, whereas appellants' composition contains about 15 wt% to about 70 wt% water.[3,4] The examiner has not set forth in his answer any

[3] Appellants indicate that the required amount of water in their composition includes any water added with the alumina and/or gelling agent (specification, page 5, lines 14-16).

[4] Munro indicates that when his composition is diluted to form an aqueous solution, the solution contains only about

finding as to what amount of water is present in Munro's water of crystallization.

The examiner argues that Munro's disclosed diluted composition concentrations of 0.15 wt% and 0.2 wt% are exemplary for a particular end use, and that to obtain higher coverage of the scouring composition or a less abrasive composition, it would have been obvious to one of ordinary skill in the art to dilute the composition to other concentrations between that of the concentrated composition which contains no more than about 5 wt% free water, and that of the disclosed diluted compositions containing 99.8 wt% to 99.85 wt% water (answer, pages 10 and 12).

One of ordinary skill in the art, the examiner argues, would be aware that as the dilution is increased, a point is reached at which the shear thinnable characteristic of the composition is lost (answer, page 10).

Appellants argue that Munro uses a low water content in

0.15 wt% or 0.2 wt% of the composition (col. 5, lines 1-4 and 53-56). Appellants (brief, page 7) and the examiner (answer, page 12) agree that such a solution would not be shear thinnable as required by appellants' claims.

his concentrated composition because if the composition contained more water, the inorganic salts would be dissolved and, consequently, could not serve as abrasive agents as desired by Munro (brief, pages 6-7). Thus, appellants argue, Munro teaches away from their claimed invention (brief, page 7). Appellants point out that an inorganic salt in their composition serves as a gelling agent and, therefore, is to be in the dissolved state (brief, page 5). Appellants further argue that the examiner's conclusion that Munro would have fairly suggested, to one of ordinary skill in the art, making a shear thinnable composition containing about 15 wt% to about 70 wt% water, is based upon hindsight (brief, page 8).

The examiner has provided no evidence or technical reasoning which shows that one of ordinary skill in the art would have expected that diluting Munro's composition such that it has a

water concentration of about 15 wt% to about 70 wt%, as required by appellants' claims, would produce a composition

which has undissolved inorganic salt such that the composition is suitable for its intended purpose of scouring, and which is still shear thinnable. As stated above, the examiner argues that one of ordinary skill in the art would have been motivated to dilute Munro's composition to obtain greater coverage or less abrasion, and would have known that a dilution would be reached at which the composition is no longer shear thinnable. The examiner, however, has provided no evidence or reasoning as to why Munro would have motivated one of ordinary skill in the art to use a water concentration as high as about 15 wt% to about 70 wt% as required by appellants' claims, and would have provided such a person with a reasonable expectation that a composition containing that amount of water would be shear thinnable. *See In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991)*; In re O'Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988); *In re Longi*, 759 F.2d 887, 892-93, 225 USPQ 645, 648 (Fed. Cir. 1985). On this record, the guidance for use of such a water concentration comes solely from the description

of appellants' invention in their specification. The examiner, therefore, used impermissible hindsight when rejecting the claims. *See W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984); *In re Rothermel*, 276 F.2d 393, 396, 125 USPQ 328, 331 (CCPA 1960). Accordingly, we do not sustain the examiner's rejection over Munro.

Rejection over Munro in view of Baxter

The examiner relies upon Baxter only for suggestion to use boehmite as Munro's alumina (answer, pages 5-6). Because Baxter has not been relied upon for any teaching which would remedy the deficiency in Munro discussed above, we reverse the rejection over Munro in view of Baxter.

Rejection over Wilkins

Wilkins discloses a water-soluble stripping composition which includes, on a weight basis, about 1 to about 50 parts water, about 1 to about 30 parts peroxide, and about 25 to about 95 parts of a water-soluble ester containing from 4 to 10 carbon atoms (col. 2, lines 3-13). The composition can contain cosolvents or diluents and, as a percentage of the

above

composition, from about 0.5 to about 20 wt% of a thickening agent which can be colloidal alumina, from about 0.01 to about 10 wt% of a water soluble surfactant, from about 0.1 to about 3 wt% of corrosion inhibitors, from about 0.01 to about 10 wt% of chelating agents, from about 0.01 to about 1 wt% of stabilizers for the hydrogen peroxide, from about 0.1 to about 5 wt% of evaporation retardants, and not more than 25 wt% of an acid as a coactivator (col. 2, line 54 - col 4, line 39).

Wilkins does not state that the disclosed composition is shear thinnable.

Appellants argue that the fact that Wilkins' composition can be thickened such that it is viscous does not mean that it is shear thinnable (brief, pages 10-11). In appellants' view, the teaching by Wilkins (col. 4, lines 39-41) that diluents may be added to lower the viscosity of the composition indicates that the composition is merely viscous and not shear

thinnable (brief, page 10).[5] Appellants argue that to arrive at their claimed invention from Wilkins, it is necessary to pick and choose from Wilkins based on appellants' disclosure (brief, page 11).

The examiner argues that it would have been obvious to one of ordinary skill in the art to select colloidal alumina from among Wilkins' disclosed thickening agents (answer, page 6), but does not argue that any further modification would be needed to produce appellants' composition. The examiner also argues that Wilkins' materials are the same as those of appellants and that, therefore, Wilkins' composition has the same properties as appellants' composition (answer, pages 13-14).

Thus, it appears that the examiner's position is that when Wilkins' thickener is colloidal alumina, the composition inherently is shear thinnable.

When an examiner relies upon a theory of inherency, "the examiner must provide a basis in fact and/or technical

[5] The examiner does not respond to this argument.

reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Int. 1990). Inherency "may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Ex parte Skinner*, 2 USPQ2d 1788, 1789 (Bd. Pat. App. & Int. 1986).

In the present case, the examiner has not provided the required evidence or technical reasoning which shows that Wilkins' composition, when the thickener is colloidal alumina, necessarily is shear thinnable.

We note that Wilkins does not disclose an example wherein the thickener is colloidal alumina. Thus, there is no specifically disclosed composition which may be considered to be sufficiently similar to appellants' composition that the properties of the compositions are substantially the same. *See In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657-58 (Fed. Cir. 1990).

Moreover, the components of Wilkins' composition other than water, peroxide, and the water soluble ester are optional (col. 5, lines 10-17). Thus, it is not necessary that Wilkins' composition includes a component which can serve as a gelling agent. Because Wilkins does not disclose that the composition can be shear thinnable, there is no guidance to use, in combination with colloidal alumina, a material which can function as a gelling agent. As argued by appellants (brief, page 11), picking and choosing from Wilkins' disclosure based on appellants' specification is required.

Furthermore, the amounts of chelating agent, which the examiner apparently considers to correspond to appellants' gelling agent (answer, page 6), and coactivator acid, which apparently can serve as a gelling agent,[6] can be present together in an amount which greatly exceeds the amount of gelling agent recited in appellants' claims. The examiner has not explained why, if large amounts of these components were

[6] Appellants state in their specification (page 4, lines 30-31) that "[g]enerally speaking, virtually any ionic compound can be employed as a gelling agent."

used, the composition would have the property recited in appellants' independent claim of being a stable gel when in the quiescent stage but becoming free-flowing on the application of a moderate shearing force. Also, the examiner has not discussed any effect which Wilkins' required peroxide might have on Wilkins' composition with respect to being shear thinnable.

For the above reasons, we conclude that the examiner has not carried his burden of establishing a *prima facie* case of obviousness of appellants' claimed invention over Wilkins.

DECISION

The rejections under 35 U.S.C. § 103 of claims 1, 3, 4 and 6-10 over Munro, claims 1 and 6 over Munro in view of Baxter, and claims 1, 3, 4 and 6-10 over Wilkins, are reversed.

REVERSED

BRADLEY R. GARRIS Administrative Patent Judge	)
CHUNG K. PAK Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
TERRY J. OWENS Administrative Patent Judge	)

TJO/pgg
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